

## UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/255,856 02/23/99 IWASAKI 501.39631X00 **EXAMINER** MMC2/0530 ANTONELLI, TERRY, STOUT SMOOT,S & KRAUS ART UNIT PAPER NUMBER 1300 NORTH SEVENTEENTH STREET 15 SUITE 1800 2813 ARLINGTON VA 22209 DATE MAILED: 05/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Advisory Action	Application No.	Applicant(s)
	09/255, 856	IWASAKI ET AL.
	Examiner	Art Unit
	Stephen W. Smoot	2813
The MAILING DATE of this communication appe		
THE REPLY FILED 11 May 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.		
PERIOD FOR REPLY [check only a) or b)]		
<ul> <li>a) The period for reply expires 3 months from the mailing date of the final rejection.</li> <li>b) In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.</li> </ul>		
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37CFR 1.191(d)), to avoid dismissal of the appeal.		
2. The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.		
3. The proposed amendment(s) will not be entered because:		
(a) ☑ they raise new issues that would require further consideration and/or search. (see NOTE below);		
(b) ☑ they raise the issue of new matter. (see Note below);		
(c) ☑ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or		
(d) they present additional claims without canceling a corresponding number of finally rejected claims.		
NOTE: <u>See Continuation Sheet</u> .		
4. ☑ Applicant's reply has overcome the following rejection(s): <u>See Continuation Sheet.</u>		
5. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).		
6. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.		
7. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.		
8. For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):		
Claim(s) allowed:		
Claim(s) objected to:		
Claim(s) rejected: <u>1-6 and 9-29</u> .		
Claim(s) withdrawn from consideration: 8.		
9. The proposed drawing correction filed on a) has b) has not been approved by the Examiner.		
10. Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s)		
11. Other:		

Continuation of 3. NOTE:

(a) Changing diffusion barrier to neighboring film changes the scope of the claims; consideration of the newly added term "prevents voids due to electromigratrion of copper" would be required; and consideration of limiting ruthenium to being "a primary constituent" would be required.

(b) The definition of "primary constituent element" as defined by the applicant in Paper no. 14, page 9, lines 19-22 would require further consideration to ascertain that it was well known at the time of the applicant's invention.

Continuation of 4. Applicant's reply has overcome the following rejection(s): The 35 USC section 112, second paragraph rejection of claim 6 (see Paper No. 11, paragraph 4) has been withdrawn in light of applicant's remarks (see Paper No. 14, page 12, first full paragraph).

Continuation of 6. does NOT place the application in condition for allowance because: Most of the applicant's arguments are based on amendment C (Paper No. 14) which has not been entered for the above reasons. Applicant's argument regarding consideration of process limitations in product-by-process claims has been reconsidered in view of In re Luck (see Paper No. 14, page 25, last paragraph), but is not persuasive because In re Luck specifies that the process limitations must distinguish the product over the prior art

Chardfari
Chandra Chaudhari
Primary Examiner